

2. Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

- 1-43. (*canceled*)
44. (*New*) A medium for culturing mammalian cells comprising mannose, fructose, galactose, and N-acetylmannosamine.
45. (*New*) The medium of claim 44, wherein the medium is serum free.
46. (*New*) The medium of claim 44, wherein the mammalian cells are CHO cells.
47. (*New*) The medium of claim 44, wherein the concentrations of galactose, mannose, and fructose are each from about 1 mM to about 10 mM and the concentration of N-acetylmannosamine is at least about 0.8 mM.
48. (*New*) The medium of claim 44, wherein the concentrations of galactose, mannose, and fructose are each from about 1.5 mM to about 4.5 mM.
49. (*New*) A method for increasing the sialic acid content of a protein produced by mammalian cells comprising culturing the cells in the medium of claim 44.
50. (*New*) The method of claim 49, wherein the medium is serum free.
51. (*New*) The method of claim 49, wherein the cells are CHO cells.
52. (*New*) The method of claim 49, wherein the concentrations of galactose, mannose, and fructose are each from about 1 mM to about 10 mM and the concentration of N-acetylmannosamine is at least about 0.8 mM.
53. (*New*) The method of claim 49, wherein the concentrations of galactose, mannose, and fructose are each from about 1.5 mM to about 4.5 mM.
54. (*New*) The method of claim 49, wherein the protein is a secreted, recombinant protein.
55. (*New*) The method of claim 49, wherein the cells are cultured at a temperature from about 29°C to about 36°C.
56. (*New*) A medium for culturing mammalian cells comprising galactose and N-acetylmannosamine.
57. (*New*) The medium of claim 56, wherein the medium is serum free.

58. (New) The medium of claim 56, wherein the mammalian cells are CHO cells.

59. (New) The medium of claim 56, wherein the concentration of galactose, is from about 1 mM to about 10 mM and the concentration of N-acetylmannosamine is at least about 0.8 mM.

60. (New) The medium of claim 56, wherein the concentration of galactose is from about 1.5 mM to about 4.5 mM.

61. (New) A method for increasing the sialic acid content of a protein produced by mammalian cells comprising culturing the cells in the medium of claim 56.

62. (New) The method of claim 61, wherein the medium is serum free.

63. (New) The method of claim 61, wherein the cells are CHO cells.

64. (New) The method of claim 61, wherein the concentration of galactose, is from about 1 mM to about 10 mM and the concentration of N-acetylmannosamine is at least about 0.8 mM.

65. (New) The method of claim 61, wherein the concentration of galactose, is from about 1.5 mM to about 4.5 mM.

66. (New) The method of claim 61, wherein the protein is a secreted, recombinant protein.

67. (New) The method of claim 61, wherein the cells are cultured at a temperature from about 29°C to about 36°C.

68. (New) A medium for culturing mammalian cells comprising mannose, fructose, and galactose.

69. (New) The medium of claim 68, wherein the medium is serum free.

70. (New) The medium of claim 68, wherein the mammalian cells are CHO cells.

71. (New) The medium of claim 68, wherein the concentrations of galactose, mannose, and fructose are each from about 1 mM to about 10 mM.

72. (New) The medium of claim 68, wherein the concentrations of galactose, mannose, and fructose are each from about 1.5 mM to about 4.5 mM.

73. (New) A method for increasing the sialic acid content of a protein produced by mammalian cells comprising culturing the cells in the medium of claim 68.

74. (New) The method of claim 73, wherein the medium is serum free.
75. (New) The method of claim 73, wherein the cells are CHO cells.
76. (New) The method of claim 73, wherein the concentrations of galactose, mannose, and fructose are each from about 1 mM to about 10 mM.
77. (New) The method of claim 73, wherein the concentrations of galactose, mannose, and fructose are each from about 1.5 mM to about 4.5 mM.
78. (New) The method of claim 73, wherein the protein is a secreted, recombinant protein.
79. (New) The method of claim 73, wherein the cells are cultured at a temperature from about 29°C to about 36°C.
80. (New) A medium for culturing mammalian cells in suspension comprising fructose and galactose.
81. (New) The medium of claim 80, wherein the medium is serum free.
82. (New) The medium of claim 80, wherein the mammalian cells are CHO cells.
83. (New) The medium of claim 80, wherein the concentrations of galactose, and fructose are each from about 1 mM to about 10mM.
84. (New) The medium of claim 83, wherein the concentrations of galactose and fructose are each from about 1.5 mM to about 4.5 mM.
85. (New) A method for increasing the sialic acid content of a protein produced by mammalian cells comprising culturing the cells in suspension in the medium of claim 80.
86. (New) The method of claim 85, wherein the medium is serum free.
87. (New) The method of claim 85, wherein the cells are CHO cells.
88. (New) The method of claim 85, wherein the concentrations of galactose and fructose are each from about 1 mM to about 10 mM.
89. (New) The method of claim 88, wherein the concentrations of galactose and fructose are each from about 1.5 mM to about 4.5 mM.
90. (New) The method of claim 85, wherein the protein is a secreted, recombinant protein.
91. (New) The method of claim 85, wherein the cells are cultured at a temperature from about 29°C to about 36°C.